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EXAMINER JAMA, ISAAK R				
ART UNIT 2617		PAPER NUMBER		
NOTIFICATION DATE 09/26/2011		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary**Application No.**

10/553,000

Applicant(s)

SAKAMOTO, KENJI

Examiner

Isaak R. JAMA

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-20 is/are pending in the application.
- 5a) Of the above claim(s) 2 is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-6 and 8-20 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-853)
Paper No(s)/Mail Date ____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 05/16/2011 have been fully considered but they are not persuasive. Applicant argues that the combination of U.S. Patent Publication Number 2001/0021998 (Margulis), U.S. Patent Number 6,993,363 (Hsu) and U.S. Patent Number 6,574,266 (Haartsen) do not disclose the elements set forth in independent claims 1, 18 and 20. Applicant, in an attempt to distinguish the claimed invention from the prior art of record further asserts that the claims are directed to features of a wireless terminal, a method for controlling a wireless terminal and a computer readable medium encoded with executable instructions for controlling the wireless terminal. In a feature of the invention, the wireless terminal communicates with the base device by using a plurality of transmission channels, and the base device selects each of the one of the plurality of transmission channels in every cycle. The Examiner respectfully disagrees with Applicants assertion. As set forth in the rejection of the claims, Margulis teaches a wireless terminal comprising: communication means for exchanging, with a base device **[Figure 3, # 310, page 4, paragraph 0045]** either (i) video data and/or audio data **[Figure 8, # 812, video, audio and data]**, or (ii) a control command containing transmission channel switching information **[Page 4, paragraph 0047; i.e. the remote controller responsively displays at least one selectable program source]**; And Hsu teaches a communication condition detection means for detecting a communication condition; and indication means for indicating at least a transmission condition of the control command, according to the communication

condition detected by the communication condition detection means **[Abstract]**. In order to buttress the rejection and to reject the teaching of the wireless terminal communicates with the base device by using a plurality of transmission channels, and the base device selects each of the one of the plurality of transmission channels in every cycle, the Examiner introduced Haartsen. Once again, Haartsen teaches a base station assisted terminal to terminal connection setup, whereby the central base station preferably has all the intelligence needed to determine what channels are attractive to use. This determination can be based on either a fixed channel plan, like the channel plans known in cellular radio telephone systems, or adaptive channel allocation measurements, or a random channel selection. In addition, the central base station knows all of the terminals' characteristics, like timing and sleep behavior. When a terminal wants to communicate with another terminal, the initiating terminal sends a request for a setup to the base station it is currently locked to. This base station then informs the terminal to be connected of this request, and this base station informs both terminals of the channel (and perhaps the timing) to use for the connection. The terminals then switch to the new channel and establish a connection **[Column 7, lines 34-48]**. Therefore, the earlier rejection to the claims still stands.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4-6, 8-11 and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication Number 2001/0021998 (Margulis) in view of U.S. Patent Number 6,993,363 (Hsu) and further in view of U.S. Patent Number 6,574,266 (Haartsen).
3. Regarding claims 1, 15 and 18-20, Margulis teaches a wireless terminal comprising: communication means for exchanging, with a base device **[Figure 3, # 310, page 4, paragraph 0045]** either (i) video data and/or audio data **[Figure 8, # 812, video, audio and data]**, or (ii) a control command containing transmission channel switching information **[Page 4, paragraph 0047; i.e. the remote controller responsively displays at least one selectable program source]**; And Hsu teaches a communication condition detection means for detecting a communication condition; and indication means for indicating at least a transmission condition of the control command, according to the communication condition detected by the communication condition detection means **[Abstract]**. But neither Margulis nor Hsu teach that the wireless terminal switches the transmission channels either (i) every cycle corresponding to not less than a period during which the base device selects all the transmission channels, or (ii) every cycle corresponding to a period during which the base device selects all the transmission channels and which corresponds to time in which the wireless terminal maintains one of the transmission channels. Haartsen teaches a base station assisted terminal to terminal connection setup **[Title]**, whereby the central base station preferably has all the intelligence needed to determine what channels are attractive to

use. This determination can be based on either a fixed channel plan, like the channel plans known in cellular radio telephone systems, or adaptive channel allocation measurements, or a random channel selection. In addition, the central base station knows all of the terminals' characteristics, like timing and sleep behavior. When a terminal wants to communicate with another terminal, the initiating terminal sends a request for a setup to the base station it is currently locked to. This base station then informs the terminal to be connected of this request, and this base station informs both terminals of the channel (and perhaps the timing) to use for the connection. The terminals then switch to the new channel and establish a connection **[Column 7, lines 34-48]**. In addition Haartsen teaches that the transmission channels comprising a number of communication channels for communication between the base device and the wireless terminal **[Column 2, lines 14-17]**. Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to incorporate the teaching of Haartsen into the teaching of Margulis and Hsu in order to avoid concurrent radio transmission by both wireless systems.

4. Regarding claim 4, Hsu further teaches a wireless terminal, wherein the communication condition detection means detects the communication condition with the base device, with which a communications link is established **[Column 12, lines 19-24]**. Therefore, it would have been obvious to include the teaching of Hsu into the system of Margulis in order to inform the user of any communication link interruption.
5. Regarding claim 5, Hsu further teaches a wireless terminal, wherein the indication means indicates at least any one of reception sensitivity information items

indicating that the video data and/or the audio data are interrupted, that transmission channels are being switched, that connection is being made, and that the wireless terminal is out of communication range **[column 12, lines 25-30]**. Therefore, it would have been obvious to include the teaching of Hsu into the system of Margulis in order to provide the user with perceptible alerts.

6. Regarding claim 6, Margulis further teaches a wireless terminal, wherein the indication means either displays a message by using display means or carries out message sound production by using audio output means **[Page 2, paragraph 0020]**.

7. Regarding claim 8, Margulis further teaches a wireless terminal, wherein the communication means transmits either (i) the video data and/or the audio data, or (ii) the control command, in accordance with a spread spectrum wireless method **[page 4, paragraph 0055]**.

8. Regarding claim 9, Margulis further teaches a wireless terminal, wherein the communication means performs low-power short-distance two-way wireless communication in conformity to wireless LAN, or Bluetooth, and Ultra Wide Band **[Page 6, paragraph 0069; i.e. the network processing procedure may depend on various factors such as the particular wireless transmission techniques utilized for effective wireless transmission or the type of bus arbitration required for WAN or LAN interfaces]**.

9. Regarding claim 10, Margulis further teaches that the communication means transmits the video data and/or audio data in a form of MPEG stream encoded in

conformity with an MPEG-2 encoding method **[Page 5, paragraphs 0058 and 0060, respectively]**.

10. Regarding claim 11, Margulis further teaches a wireless terminal, comprising: a display device for displaying a video signal according to the video data that the display device receives **[Figure 3, # 314]**.

11. Regarding claim 13, Margulis further teaches a base device **(Figure 1, # 156)** for exchanging, with the wireless terminal **[Page 3, paragraph 0040; i.e. the wireless base station may be implemented as a set-top box which communicates with a wireless remote]**, either (i) video data and/or audio data **[Figure 8, # 812, video, audio and data]**, or (ii) a control command containing transmission channel switching information **[Page 4, paragraph 0047; i.e. the remote controller responsively displays at least one selectable program source]**.

12. Regarding claim 14, Hsu further teaches a base device, comprising: communication condition detection means for detecting a communication condition the base device transmitting, to the wireless terminal, information indicative of the communication condition detected by the communication condition detection means **[Abstract]**. Therefore, it would have been obvious to include the teaching of Hsu into the system of Margulis in order to notify the user of any lack of communication.

13. Regarding claim 16, Margulis further teaches a base device, wherein the video data and/or the audio data is received via a broadcast receiving tuner **[Page 6, paragraph 0067]**.

14. Regarding claim 17, Margulis further teaches a wireless system, comprising: the wireless terminal; and a base device **[Figure 3, #310 and Figure 5, # 156]**for exchanging, with the wireless terminal **[Page 4, paragraph 0045]**, either (i) video data and/or audio data **[Figure 8, # 812, video, audio and data]**, or (ii) a control command containing transmission channel switching information **[Page 4, paragraph 0047; i.e. the remote controller responsively displays at least one selectable program source]**.

15. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Margulis, Hsu and Haartsen as applied to claim 1 above in view of U.S. Patent Number 7,210,158 (Forler).

16. Regarding claim 2, Margulis, Hsu and Haartsen has been discussed above. What Margulis, Hsu and Haartsen fail to teach is that the wireless terminal further comprising: transmission channel maintaining means for (i) measuring time from which communication is interrupted, and (ii) maintaining a transmission channel until a predetermined period of time has elapsed since interruption of the communication. Forler teaches a viewer blocking system whereby, if the television system fails to detect a new program related information within a predetermined period of time as determined by the incrementing of the V-chip Packet Timer, the television system will allow user access to the channel, or maintain the channel unblocked **[Column 6, lines 21-25]**. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the channel maintaining means of Forler into the

combined system of Margulis, Hsu and Haartsen in order to avoid a complete loss of transmission.

17. Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Margulis, Hsu and Haartsen as applied to claim 1 above in view of U.S. Patent Number 7,167,679 (Sano).

18. Regarding claim 3, Margulis, Hsu and Haartsen has been discussed above as applied to claim 1. What Margulis, Hsu and Haartsen fail to teach is that the wireless terminal detects the communication condition according to at least one of (i) an electric field intensity of a received radio wave, (ii) an error rate, and (iii) a number of times of retransmission request made based on the error rate. Sano teaches a display terminal and method for a radio LAN system for receiving image data from an apparatus by radio communication wherein, a reception quality level is displayed when the reception electric field intensity at the display terminal is sufficiently high, or when the bit error rate exhibits a high bit error rate **[Column 9, lines 59-64]**. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the signal reception quality of Sano into the combined system of Margulis, Hsu and Haartsen in order to assess the optimum positioning of the wireless terminal with respect to the base station for good quality reception of the base station transmitted signals.

19. Regarding claim 12, Margulis, Hsu and Haartsen has been discussed above as applied to claim 1, but what Margulis, Hsu and Haartsen fail to specifically teach is that the wireless terminal includes communication condition detection means for determining

whether or not an image displayed by the display device is distorted. Sano teaches a display terminal for a radio LAN system which is configured for receiving image data from a transmitting apparatus by radio communication and displaying an image based on the received image data on a display section. The display terminal comprises a reception quality supervision section, and a reception quality display control section displays a reception quality level of the display terminal on a display section of the display terminal indicative of an output of the reception quality supervision section [Column 2, lines 43-55]. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the signal reception quality of Sano into the combined system of Margulis, Hsu and Haartsen in order to ascertain the received image quality.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaak R. JAMA whose telephone number is (571)270-5887. The examiner can normally be reached on Monday-Thursday; 7:30 a.m-5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/IRJ/

**/LESTER KINCAID/
Supervisory Patent Examiner, Art Unit 2617**